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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/732,773 | 12/09/2003 | Thomas Szolyga | 200312967-1 | 6954 |
| 22879 | 7590 | 07/26/2005 | EXAMINER | |
| HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400 | | | PAPE, ZACHARY | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2835 | |

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/732,773 | | SZOLYGA ET AL. | |
| | Examiner | | Art Unit | |
| | Zachary M. Pape | | 2835 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-16 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 17-25 is/are rejected.
- 7) ☒ Claim(s) 10 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/9/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 10 and 16 are objected to because of the following informalities:

In claim 10 the phrase, "each interlock portion comprises and aperture" is incorrect. It appears the phrase should be changed to read, "each interlock portion comprises an aperture".

In claim 16 the phrase, "wherein release switch" is incorrect. It appears it should be changed to read, "wherein the release switch".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1- 2, 5-7, 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang (US 5,947,572).

With respect to claim 1, Chang teaches a removable device including a multifunction handle (21) coupled to the device, the multifunction handle including a force-developing portion (22) and including an interlock portion adapted to be engaged by an interlock component (32), the handle operable to develop an insertion force at the force-developing portion responsive to a force applied to the handle and operable to

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secure the removable device in a desired position and prevent use of the handle responsive to the interlock portion being engaged by the interlock component (Column 3 Line 60 – Column 4 Line 23; Further illustrated in Figs 3 and 4).

With respect to claim 5, Chang further teaches that the removable drive has a top panel, bottom panel, and two side panels (As illustrated in Fig 2), and wherein the multifunction handle rotates in an upward and a downward direction about an axis that is parallel to the top and bottom panels (As illustrated in Figs 3-5).

With respect to claim 6, Chang further teaches that the removable drive has a top panel, bottom panel, and two side panels (As illustrated in Fig 2), and wherein the multifunction handle develops the insertion force responsive to a sideways force applied Leftward or rightward to the handle (The handle (21) has a generally upward or downward force applied to it to develop the insertion force, however there will be inevitably be some leftward or rightward forces on the handle which help to develop the insertion force).

With respect to claim 17, Chang further teaches a multifunction handle (21) adapted to be coupled to a removable device (20), the multifunction handle including a force-developing portion (22) and including an interlock portion adapted to be engaged by an interlock component (32), the handle operable to develop an insertion force at the force-developing portion responsive to a force applied to the handle and operable to be secured in a fixed position responsive to the interlock portion being engaged by the interlock component (Column 3 Line 60 – Column 4 Line 23; Further illustrated in Figs 3 and 4).

With respect to claims 2 and 18, Chang further teaches that the force-developing portion comprises a cam (As illustrated in Fig 3).

With respect to claim 19, Chang further teaches that the interlock portion comprises an aperture (The interlocking portion must contain an aperture at least for the reason that it connects 22 to 25).

With respect to claims 7 and 20, Chang further teaches that the handle comprises: a front member (24), a back member (Which 25 connect to), a first side member (25) having a first end coupled to the front member and a second end coupled to the back member, a second side member (25) having a first end coupled to the front member and a second end coupled to the back member, and including an aperture corresponding to the interlock portion (The interlocking portion must contain an aperture at least for the reason that it connects 22 to 25) and at least one insertion cam (Extending part of 22) extending from the back member.

3. Claims 1, 3, and 4 are further rejected under 35 U.S.C. 102(b) as being anticipated by Liu et al. (US 6,396,686).

With respect to claim 1, Liu et al. teaches a removable device (40) including a multifunction handle (39) coupled to the device, the multifunction handle including a force-developing portion (A force can be developed on handle 39) and including an interlock portion (382) adapted to be engaged by an interlock component (20), the handle operable to develop an insertion force at the force-developing portion responsive to a force applied to the handle and operable to secure the removable device in a desired position and prevent use of the handle responsive to the interlock portion being

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engaged by the interlock component (When the interlocking components (20) are in place, the handle is locked to the removable device and prevents the use of the handle (The handle cannot be removed from the disk drive).

With respect to claim 3, Liu et al. further teaches that the interlock portion (382) comprises an aperture in the handle and an aperture (42) in a side of the removable device, and wherein the interlock component comprises a rod (24) adapted to extend through the two apertures (As illustrated in Fig 1).

With respect to claim 4, Liu et al. further teaches that the removable device comprises a removable mass storage device (Liu et al; Title).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Weng et al. (US 6,836,406).

With respect to claim 21, Weng et al. teaches a method of inserting a removable drive (2) into a drive bay (20) of a computer system, the removable drive including a

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handle (11) and the method comprising: applying a force to the handle to insert the drive into the drive bay (Pressing on the exterior of the handle will push the drive into the bay); detecting the insertion of the drive into the drive bay (Status indicator 13 implies that the disk drive system of Weng et al. detects that the drive is inserted into the drive bay); disabling use of the handle and securing the drive in the drive bay responsive to the detecting the insertion of the drive into the drive bay (Once the drive is inserted into the bay, the handle is made inoperable until the pushing mechanism (16) pushes the handle out; Column 5, Lines 5-11); detecting activation of a release mechanism, and enabling use of the handle responsive to detecting activation of the release mechanism (After a command is given to release the drive, the pushing mechanism (16) pushes out the handle (11) thus enabling the use of the handle).

With respect to claims 22 and 23, Weng et al further teaches that detecting activation of a release mechanism comprising detecting an activation of a switch (In order for the pushing mechanism (16) to release the handle (11), the pushing mechanism must be triggered by a switch either within the control circuits or physically by the user via use of a button (on the drive itself, or via an input from a displayed button on a screen, etc.).

With respect to claim 24, Weng et al. further teaches updating information stored on the removable drive after detecting activation of a release mechanism and before enabling use of the handle (In Column 3, Lines 15-20 Weng states "a convenient and safe automated disk-ejection" which implies that the disk drive will put itself into condition for removal which includes updating any information on the drive)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weng et al. in view of Chang (US 5,959,834). With respect to claim 25, Weng et al teaches the limitations as applied to claim 21 above, but fails to teach that disabling the use of the handle comprises inserting a rod through an aperture in the handle. Chang teaches the use of a disk drive system comprising inserting a rod (36) through an aperture (22) in a handle (21) to disable the use of the handle. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the handle disabling system of Chang with the disk drive ejection system of Weng et al. to provide another means to lock the disk drive into the bay. The use of the rod provides another means by which the disk drive can remain locked into the drive bay, and further the locking mechanism of Chang is manual in operation giving the user an alternative manual control over the lock.

Allowable Subject Matter

6. Claims 8-16 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The allowability resides in the overall structure of the device as recited in independent claim 8 and at least in part because claim 8 recites, "and the interlock mechanism operable to disengage the interlock portion responsive to a deactivation signal from the computer circuitry developed responsive to the release switch being activated".

The aforementioned limitations in combination with all remaining limitations of claim 8 are believed to render said claim 8 and all claims dependent therefrom patentable over the art of record.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Morrison (US 5,612,927) which teaches the conventionality of allowing a hard drive to update information before ejection. Dague et al. (US 6,094,342) which teaches rods securing a disk drive to a bay.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary M. Pape whose telephone number is 571-272-2201. The examiner can normally be reached at Mon. - Thur. & every other Fri. (8:00am - 5:00pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ZMP


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